

Instructional Strategies Using Educational Technology:

An Ethnographic Analysis

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Introduction

I conducted approximately 90 hours of field experience in three different educational settings. As I completed my field hours of observation and participation, I was focusing my attention to how educators and students were using educational technology for instructional purposes. Technology has become an important part of our daily lives and is steadily become a part of our educational careers as well. Schools have been investing billions of dollars on technologies, such as desktop computers, internet access, and educational software (Kleiman, 2000). This educational shift became obvious during my field experience, but it seems that we are still far from where we would like to be with educational technology for instructional use.

Although many teachers have heard from other teachers or from administration about how great technology is and its benefits to students, many of them are still hesitant to try it in their classrooms. For example, Ertmer (2005) stated that although teachers receive information on how to create spreadsheets and have heard of teachers who have used it successfully, they are still not convinced that such tool will work for them. This leads me to believe that if a teacher does not feel that technology will help them, they will not use it, regardless of what others tell them. However, administration should provide help for teachers to identify instructional practices using technology that are successful so that their beliefs can change and they may view technology in a positive way and will want to try it in their classrooms (Ertmer, 2005).

There seem to be many factors that contribute to teacher's decision in using educational technology in the classroom, regardless of whether they believe it will help students be

successful in school. Although much money is being spent on educational technology resources and tools, “teachers have not received adequate training and support for integrating technology into the core of day-to-day classroom instruction...” (Kleiman, p. 2, 2000). So even if technology is available, teachers may not use it because they do not feel comfortable using it. Furthermore, many schools do not have access to people who can teach them how to use it. That seems to be one of the main barriers for integration technology.

For those teachers that do use educational technology in the classroom, past research has proven that there seems to be three main categories into which their use falls under. These include technology for instructional preparation, technology for instructional delivery, and technology as a learning tool (Inan & Lowther, 2010). Technology for instructional preparation includes things such as creating materials for lessons and locating digital resources, technology for instructional delivery consists of using technology during a lesson, such as a PowerPoint presentation, and technology as a learning tool consists of using technology to solve problems (Inan & Lowther, 2010). In this ethnographic analysis, I seek to observe which category is used the most at the educational institute in which I conducted my field work.

Method

Participants and Procedures

This ethnographic analysis was conducted at an elementary school site. The site is made up of the principal, two instructional coaches, 2 intervention teachers, 28 teachers, and approximately 720 students in Kinder-5th grade. I conducted observations in classrooms, during staff and grade-level meetings, in the computer lab (media center), and in the library with the teacher librarian.

During classroom and teacher librarian observations, I focused on how technology was used for instructional purposes. I used the three categories previously mentioned as a basis for technology uses. I also made observations of how the administrator and instructional coaches used educational technology during staff meetings and grade level collaboration meetings.

Findings

During my field experience, I observed educational technology being used for a variety of different reasons and in different ways. However, many trends were evident as to instructional strategies for its use. Nearly 100% of teachers I observed and worked with use technology for instructional preparation. With the new English language arts program adoption, many of the resources are only available online. This means that teachers were almost required to go online to prepare their lesson plans in language arts. Through the program's website, teachers could access materials necessary to teach lessons. The school principal and instructional coaches also used technology to plan and prepare for staff meetings. Through my observations, I noticed that most teachers also used search engines on the internet to access materials for their daily instruction. These included worksheets, online articles, and readings for students to use.

The second category of technology use was not as prominent as the first. Technology for instructional delivery was being used by about 43% of teachers I observed. However, it was not being used for delivery daily. The teachers who used technology for delivery of instruction only did so about two-three times a week. The instructional uses of technology for delivery that I observed consisted mostly of PowerPoint presentations and showing videos to introduce or teach a concept. For example, the teacher librarian used a PowerPoint presentation to teach her students about the Dewey Decimal system. The presentation made the activity more engaging

and animated for students. One teacher was using a YouTube video to introduce the concept of themes of a story to her students. Another teacher used an instructional video to teach about fractions to his fourth-grade students. In these cases, teachers were manipulating the technology while students absorbed the information from the technology.

Technology use as a learning tool was the category which was used the least. Not very many teachers used technology as an instructional tool for students to use and manipulate. Most students only had access to technology in the computer lab. The students at the school site only visit the computer lab once a week with their teachers. While there, they used technology for very basic skills. These included keyboard practice, online math games, and typing essays on Microsoft Words. This school also has 4 carts of laptops for teachers to check out for classroom. However, only two or three teachers were utilizing them. Those that checked them out, however, were using them for word processing.

The administration was trying to change this minimal use of technology as a learning tool through various methods. During a school-wide staff meeting, the principal used an online assessment tool called *Plickers*. Instead of presenting data to staff using handouts like usual, she asked a series of questions using *Plickers* and then discussed the responses. She hoped that through modeling use of technology, teachers would be more willing to use it. Teachers also received a few teacher workshops focusing on educational technology and instructional strategies to use in the classroom.

Implications

Based on observations, the school site has a lot of work to do with instructional uses of educational technology. The school administration is on the right path by modeling and

encouraging technology use and by offering professional development opportunities through technology workshops. Although teachers are using educational technology at the very basic level, it seems that with continued support, they will get there. There seems to be a lack of instructional strategies that teachers can use and build upon for educational technology implementation. Next steps should include more professional development on specific technological tools and best practices and training on how to use them.

References

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